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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,408	09/26/2001	Ludo Adriaensen	016782-0235	1783

7590

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EXAMINER

SALVATORE, LYNDIA

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 06/23/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/890,408

Applicant(s)

ADRIAENSEN ET AL.

Examiner

Lynda M Salvador

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 1 is indefinite because of the phrase "to realize" in line 7. Specifically, it is unclear how the coated metal member "realizes" an adhesion between the thermoplastic matrix material and metal member.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adriaensen et al., WO 98/55682 in view of Daisel LTD, JP 52126465A.

The published PCT application to Adriaensen et al., teaches a fabric canvass reinforcement comprising at least one warp and weft formed by a strip which comprises a matrix of thermoplastic material which is adherable to the plastic coating of the canvass (Abstract and Page 3, 5-6). The strips are made from two or more elongated metal members with an average thickness ranging from .50 mm to 3.0mm and are preferably located parallel in the plane of the

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strip (Page 3, 6-16). Suitable metal materials include steel, copper or a low carbon steel wire with a carbon content below .4% (Page 5, 6-15). The steel wire may be flat or round (Page 5, 16). Adriaensen et al., specifically teaches that low carbon steel wires have a much smoother surface and as a result do not adhere well to the thermoplastic matrix material (Page 5, 17-21).

The breaking load of the metal members in one single strip is preferably higher than 2000

Newton (Page 7, 10-11). The polyvinylchloride compound matrix material is extruded on the metal strip (Page 9, 28-Page 6, 2).

Adriaensen et al., fails to teach coating the metal member with a primer layer, however, the Japanese patent abstract to Daisel LTD teaches coating a metal with a primer containing organic solvent, curing the primer, and then extruding the thermoplastic resin. Suitable primer materials include polyvinylchloride (PVC), epoxy-phenol, polybutadiene dissolved in organic solvent (Abstract).

Therefore, motivated by the desire to facilitate the adhesion between the metal member and the thermoplastic matrix material it would have been obvious to one having ordinary skill in the art at the time the invention was made to coat the low carbon containing metal member of Adriaensen et al., with the primer material taught by Daisel LTD.

With regard to claim 11, Adriaensen et al., does not explicitly teach the a thickness of less than .35mm, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the thickness of the metal used in the fabric reinforcement as a function of desired flexibility and thickness. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA).

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Additionally, claims 7-13, 15, 16, and 18 contain functional "whereby" statements. It has been held that the functional "whereby" statement does not define any structure and accordingly cannot serve to patently distinguish. *In re Mason*, 114 USPQ 127 44 CCPA 937 (1957).

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adriaensen et al., WO 98/55682 in view of Daisel LTD, JP 52126465A as applied to claim 1 above, and further in view of Carey, II et al., US 5,489,490.

The combined prior art references of Adriaensen et al., and Daisel LTD fail to teach coating the steel or low carbon steel materials with a zinc or with a zinc alloy layer, however, the patent issued to Carey, II et al., specifically teaches that a tin-zinc coating when applied to stainless steel or low carbon steel materials, imparts highly corrosion resistant properties (Column 4, 56-61).

Therefore, motivated by the desire to provide a fabric canvass reinforcement, which is highly resistant to corrosion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the coated the metal members of Adriaensen et al and Daisel LTD with a layer of the tin-zinc coating taught by Carey, II et al.

#### ***Conclusion***


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M Salvatore whose telephone number is 703-305-4070. The examiner can normally be reached on M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

ls   
June 16, 2003

  
TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700